AMENDMENTS TO THE CLAIMS

Please amend claim 6; cancel claims 1-5, 11-15, 22 and 23; and add claim 24, such that the status of the claims is as follows:

1.- 5. **(Canceled).**

6.**(Currently Amended)** A modeling machine of the type which builds three-dimensional objects by depositing thermally solidifiable modeling material as a road of molten material having a height *h* into a build environment having a temperature lower than an extrudate temperature of the material, and from an extrusion head that moves at a known speed in a predetermined cross-sectional pattern, comprising:

a first supply of a first thermally solidifiable modeling material, in the form of a continuous filament;

a second supply of a second thermally solidifiable modeling material, in the form of a continuous filament;

a first thermally conductive dispenser carried by the extrusion head and having an inlet for receiving the first supply of the first thermally solidifiable modeling material and a tip for dispensing roads of the first material in molten form, the tip of the first dispenser having a downward face positioned in approximately a z-plane;

a second thermally conductive dispenser carried by the extrusion head and having an inlet for receiving the second supply of the second thermally solidifiable modeling material and a tip for dispensing roads of the second material in molten form, the tip of the second dispenser being maintained in a fixed vertical position relative to the tip of the first dispenser, and having a downward face spaced apart a distance *s* from the face of the first dispenser and positioned in approximately the same z-plane as the face of the first dispenser;

~~The modeling machine of claim 1, wherein the dispensers are thermally conductive and further comprising:~~

a thermally conductive body in which the dispensers are carried;

a thermal insulator positioned in the body so as to provide thermal separation between the dispensers;

a means for heating the first dispenser to a temperature at which the first material is flowable; and

a means for heating the second dispenser to a temperature at which the second material is flowable;

wherein the distance s is great enough that a road deposited by one of the tips will shrink due exclusively to cooling during a minimum transit time Δt between the tips such that the other one of the tips does not drag across and smear the road.

7.**(Original)** The modeling machine of claim 6, wherein the thermal insulator comprises ambient air that fills a cavity in the body.

8.**(Original)** The modeling machine of claim 6, wherein the thermal insulator comprises a solid material.

9.**(Original)** The modeling machine of claim 6, wherein the road has a thermal diffusivity K_e, and wherein the minimum transit time is characterized by the relationship $\Delta t = \frac{0.3h^2}{K_e}$.

10.**(Original)** The modeling machine of claim 9, wherein the extrusion head accelerates and decelerates through a path comprising multiple vertices and the tips have a minimum vertex velocity

v_{min} and a maximum acceleration a_{max}, and wherein the spacing s is characterized by the relationship $v_{min}\Delta t + \frac{1}{2}a_{max}\Delta t^2 \leq s$ ".

11.- 15. **(Canceled).**

16.- 21. **(Canceled).**

22. **(Canceled).**

23. **(Canceled).**

24.**(New)** In a modeling machine of the type which builds three-dimensional objects by depositing thermally solidifiable modeling material as a road of molten material having a height h into a build environment having a temperature lower than an extrudate temperature of the material, and from an extrusion head that moves at a known speed in a predetermined cross-sectional pattern, the improvement comprising:

a first thermally conductive dispenser carried by the extrusion head and having an inlet for receiving a first thermally solidifiable modeling material and a tip for dispensing roads of the first material in molten form, the tip of the first dispenser having a downward face positioned in approximately a z-plane; and

a second thermally conductive dispenser carried by the extrusion head and having an inlet for receiving a second thermally solidifiable modeling material and a tip for dispensing roads of the second material in molten form, the tip of the second dispenser being maintained in a fixed vertical position relative to the tip of the first dispenser, and having a downward face spaced apart a distance s from the face of the first dispenser and positioned in approximately the same z-plane as the face of the first dispenser;

a thermally conductive body in which the dispensers are carried;

a thermal insulator positioned in the body so as to provide thermal separation between the dispensers;

a means for heating the first dispenser to a temperature at which the first material is flowable; and

a means for heating the second dispenser to a temperature at which the second material is flowable.